Attorney Docket No. MSU 4.1-643 Appln. Serial No. 10/691,328 Amendment dated June 9, 2006 Reply to Office Action dated April 11, 2006

## **SPECIFICATION**

Please replace the paragraph beginning on page NB 4/11/07 18, amended paragraph: line with the following  $\eta^1$ -pyrrolyl molybdenum catalyst (compound  ${\bf 8}$ ). As shown in Scheme 1, in the first step bromoethylbenzene (compound 2-methyl-4-ZnBr-2-butene in with reacted 1) and containing (THF) solution tetrahydrofuran (3,3-dimethyl-1produce bromoethylbenzene to pentene) benzene (compound 2). Compound 2 is then reacted with nitric acid/acetic acid/acetic anhydride to produce 2-(3,3-dimethyl-1-pentene)-1-nitrobenzene (compound 3). nitro group is reduced to an amino group in a reduction reaction comprising SnCl<sub>2</sub> and an acid, which produces 2-(3,3-dimethyl-1-pentene)-1-aniline (compound 4). Compound dimolybate  $(NH_4MO_2O_7)$ , is reacted with ammonium chlorotrimethylsilane (ClSiMe3), and triethylamine(NEt3) in dimethoxyethane (DME) to produce MoCl<sub>2</sub>(NAr)<sub>2</sub>(dme) (compound 5) which has the structure